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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,815	02/19/2002	Adam R. Schran	10397-3UI	7133
570	7590	05/02/2007		
AKIN GUMP STRAUSS HAUER & FELD L.L.P.			EXAMINER	
ONE COMMERCE SQUARE			GOLD, AVI M	
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PHILADELPHIA, PA 19103			2157	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/078,815	SCHRAN ET AL.	
	Examiner	Art Unit	
	Avi Gold	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-27 and 29-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 2-27 and 29-56 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

This action is responsive to the RCE filed on March 28, 2007. Claims 7, 13, 34, and 40 were amended. Claim 56 was added. Claims 2-27 and 29-56 are pending.

Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-3, 5-12, 14, 18, 23, 26, 27, 29-30, 32-39, 41, 45, 50, and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rehkopf, U.S. Patent No. 6,505,249, further in view of Tate et al., U.S. Patent No. 6,493,751.

Rehkopf teaches the invention substantially as claimed including a method for benchmarking and optimizing the end to end processing performance of a client-server based computer system to determine the optimal values of the system variables (see abstract).

Regarding claims 7 and 34, Rehkopf teaches a method and an article of manufacture a method and article of manufacture of optimizing network configuration settings for a user's client machine, the method and article of manufacture comprising:

- (b) establishing a network connection between the client machine and a remote server (col. 2, lines 21-23, Rehkopf discloses a client server based computer network system);
- (c) selecting one of the groups of configuration settings for the client machine (col. 2, lines 23-30, col. 8, lines 58-63, Rehkopf discloses different network settings on the client);
- (d) automatically conducting one or more performance tests using the selected network configuration settings during the established network connection (col. 2, lines 23-42, Rehkopf discloses benchmarking of the end-to-end processing performance of the network);
- (e) repeating steps (c) and (d) for one or more other groups of network configuration settings during the established network connection (col. 2, line 59 – col. 3, line 11, Rehkopf discloses different benchmarking tests); and
- (f) automatically adjusting the network configuration settings of the client machine, based on the results of the performance tests, wherein the adjusted network configuration settings are settings that optimize the performance of the client machine (col. 6, lines 37-45, Rehkopf discloses optimal value of the performance variables chosen to modify the system and optimize performance)

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Rehkopf fails to teach the limitation further including the defining a plurality of groups of network configuration settings.

However, Tate teaches a more intuitive configuration and selection process for facilitating the association of a computer employing a windows-based operating system with a network environment (see abstract). Tate teaches the use of multiple network configuration settings, specified in advance, stored in groups (col. 7, lines 30-41; col. 11, lines 28-35)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rehkopf in view of Tate to define a plurality of groups of network configuration settings. One would be motivated to do so because it allows for the most efficient configuration settings based on the network used.

Regarding claims 2 and 29, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that performs statistical analysis on past network configuration setting performance test result data (col. 3, lines 13-26, col. 7, lines 3-10, Rehkopf discloses the use of statistical analysis and a statistical algorithm on past performance on the client).

Regarding claims 3 and 30, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein regression is used to perform the statistical analysis (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 5 and 32, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 6 and 33, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the remote server (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 8 and 35, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) the user specifying, via the client machine, at least one network performance preference; and

(h) executing performance metric scoring on each of the different defined groups of network configuration settings, based on a relative weight assigned to the network performance preference (col. 2 and 3).

Regarding claims 9 and 36, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein logic running on the remote server statistically analyzes the results of the performance tests and determines one or more groups of network configuration settings for use on the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 10 and 37, Rehkopf teaches the method and article of manufacture of claims 9 and 36 wherein the logic includes an intelligent optimization algorithm which uses historical performance data to statistically assess positive or negative scoring variations when a particular network configuration setting is adjusted (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 11 and 38, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that determines future groups of network configuration settings to test (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 12 and 39, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

- (g) continually monitoring the network configuration performance of the client machine, after step (f) has been performed; and
- (h) automatically adjusting the monitored network configuration settings of the client machine to maintain optimal network performance of the client machine (col. 4, lines 35-54, Rehkopf discloses continually monitoring performance and re-evaluating).

Regarding claims 14 and 41, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is latency (col. 8, lines 1-19, Rehkopf discloses bandwidth).

Regarding claims 18 and 45, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is Maximum Segment Size (MSS) (col. 8, lines 1-19, Rehkopf discloses segment size).

Regarding claims 23 and 50, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is packet size (col. 8, lines 1-19).

Regarding claims 26 and 53, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

- (g) assigning a percentage score to each applicable network configuration setting;
- (h) multiplying the relative weight of each network configuration setting by the percentage score for the network configuration setting, wherein the relative weight is determined as a function of the user's network performance preferences; and
- (i) adding the resulting products of step (h) to determine a weighted overall percentage score (col. 2, 3).

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Regarding claims 27 and 54, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein step (b) further comprises:

(c)(i) the user selecting a group of default network configuration settings (col. 2, lines 23-30).

Regarding claims 55 and 56, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) storing the plurality of groups of network configuration settings in a storage location wherein step (c) further comprises selecting one of the groups of network configuration settings for the client machine from the storage location (col. 2, 3).

3. In considering claims 4 and 31, Rehkopf and Tate are silent in that a polynomial curve fit is used to perform statistical analysis. "Official notice" is taken that both the concept and the advantages of a polynomial curve fit are well known in the art. It would have been obvious to one skilled in the art to utilize a polynomial curve fit as an efficient way to perform statistical analysis.

In considering claims 15-17, 19-22, 24, 25, 42-44, 46-49, 51, and 52, Rehkopf is silent in that ping time, network connection stability, Maximum Transmission Unit (MTU), Receive Window (RWIN), Time To Live (TTL), Black Hole Detection, Auto Discovery of Path Maximum Transmission Unit (MTU), upload throughput speed, and download throughput speed are various forms of network configuration settings. "Official notice" is taken that both the concept and the advantages of those settings are well known in the art. It would have been obvious to one skilled in the art to analyze

and adjust those settings in the network to monitor and optimize the performance of a network.

4. Claims 13 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rehkopf and Tate further in view of Easty et al., U.S. Patent No. 6,189,008.

Rehkopf teaches the invention substantially as claimed including a method for benchmarking and optimizing the end to end processing performance of a client-server based computer system to determine the optimal values of the system variables (see abstract). Tate teaches the invention substantially as claimed including a more intuitive configuration and selection process for facilitating the association of a computer employing a windows-based operating system with a network environment (see abstract).

Regarding claims 13 and 40, Rehkopf and Tate teach the method and the article of manufacture of claims 7 and 34.

Rehkopf and Tate fail to teach the limitation further including (g) storing on the remote server, groups of network configuration settings and aggregate test results associated with other client machines that previously established a network connection with the remote server; and (h) the user's client machine receiving groups of network configuration setting recommendations from the remote server based on the groups of network configuration settings and the aggregate test results stored on the remote server.

However, Easty teaches managing the digital assets of the endpoint servers based on aggregate profile information reflecting the preferences of the user population served by the endpoint server (see abstract). Easty teaches the use of contents recommended to a user from a database, on a server, which is based on aggregate profile that reflects the preferences of the end-user population (col. 4, line 66 – col. 5, lines 7; col. 5, lines 35-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rehkopf and Tate in view of Easty to store on the remote server, network configuration settings and aggregate test results associated with other client machines that previously established a network connection with the remote server, wherein the user's client machine receives network configuration setting recommendations from the remote server, based on the network configuration settings and the aggregate test results stored on the remote server. One would be motivated to do so because it allows for quicker and more accurate configuration settings.

Response to Arguments

5. Applicant's arguments filed March 28, 2007 have been fully considered but they are not persuasive.
6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references, Rehkopf and Tate, individually where the rejections are based on combinations of references. See *In re Keller*, 642

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F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7. In response to applicant's argument that Rehkopf and Tate are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Rehkopf and Tate are both related to network configurations.

8. In response to applicant's argument that Rehkopf and Easty nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Rehkopf and Easty are related to data transferred over a network.

9. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

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reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Regarding the argument to claims 7 and 34, the applicant argues that the reference, Rehkopf, does not disclose performance tests during the established network connection. The examiner respectfully disagrees, as seen in, col. 2, line 21 – col. 3, line 11, there are performance tests inherently running during the established network connection. The tests would need a connection to run properly and there are no facts or anything indicating that the network connection is turned on and off between the tests.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,842,431 to Clarkson et al.

U.S. Pat. No. 6,725,229 to Majewski et al.

U.S. Pat. No. 6,292,483 to Kerstein

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002. The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

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AMG


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